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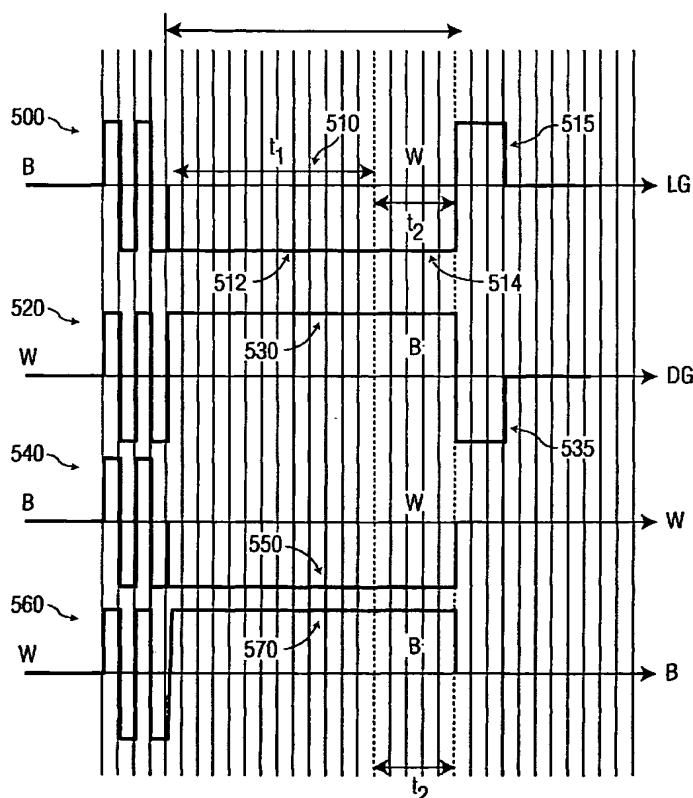
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(54) Title: **DRIVING SCHEME FOR MONOCHROME MODE AND TRANSITION METHOD FOR MONOCHROME-TO-GREYSCALE MODE IN BI-STABLE DISPLAYS**



(57) Abstract: Image quality is improved when updating a display image (310) in a bi-stable electronic reading device (300, 400) such as one using an electrophoretic display, by providing both monochrome and greyscale images. When an update mode of a pixel (2) of the display changes from a monochrome to greyscale, a compensating pulse (805, 825, 845, 865) is applied. The compensating pulse represents an energy based on the energy difference between: (a) an over-reset pulse (815, 835, 855, 875) used during the greyscale update mode and (b) a standard reset pulse (610, 660) used during the monochrome update mode. Also, a monochrome update waveform (600, 650) includes a standard reset pulse (610, 660) whose duration is substantially less than a duration of an over-reset pulse (815, 835, 855, 875) used in a greyscale update waveform (800, 820, 840 and 860). The monochrome update mode is used in combination with the greyscale update mode when possible.



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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

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